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Technical Bulletin 175
Sir-Chem® Dry Powder 75

Sir-Chem® Dry Powder 75 is a highly refined green magnetic powder used for dry method magnetic particle inspection. It is designed to be used in visible light and UV-A light and blue light to reveal minute discontinuities on fabricated components or weldments such as bridges, pipes, large tanks, machinery and equipment.

Properties

Particle Color: Green/Fluorescent Green

Specific Gravity: 2.5 to 3.0 g/ml

Particle Size: Not less than 98% passage through US Standard No. 80 (180 µm) sieve as defined in AMS 3040. The typical range of particle sizes is from 15 to 160 µm, with an average particle size of 75 µm.

Sensitivity: Sir-Chem® Dry Powder 75 shows a minimum of 8 lines on an AISI Ketos tool steel ring (as defined in SAE AS5282), set on a 1-inch diameter copper bar, magnetized with 2500 A of direct current.

Particle Certification: Particles meet all relevant specifications, including but not limited to ASTM E-1444, AMS 3040, MIL-STD-271, NAVSEA 250-1500-1, NTR-1E. Certification is included with each shipment.

Temperature Limits: 250°F (120°C)

Shelf Life: Five (5) years, when closed containers are stored in a clean, dry environment, away from excessive heat or cold. A Certificate of Shelf Life is available upon request.

Directions for Use

Apply Sir-Chem® Dry Powder 75 to the part or structure with a powder spray bulb or powder blower. As the current is being applied, dust the powder over the part. If excessive powder is visible, gently blow the extra powder off.